# Appendix B List of California Cellular Carriers

## List of California Cellular Carriers

## Total of 40 Cellular Carriers in 30 Markets (18 MSAs, 12 RSAs)

Company Name	Years of Service	Service Area
Alpine CA 3 L.P.	2	Alpine, Amador, Calaveras, Mariposa, Tuolumne Counties (RSA #3)
Bakersfield Cell. Tel. Co.	5	Kern County (Bakersfield MSA)
Bay Area Cell. Tel. Co.	7	SF, San Jose, Oakland (SF/San Jose/ Oakland MSA)
Butte County Cell. License Corp.	5	Butte County (Chico MSA)
Cagal Cell. Comms. Corp.	5	Sonoma County (Santa Rosa MSA)
Cal-One Cell. L.P.	3	Del Norte, Humboldt, Siskiyou, & Trinity Counties (RSA #1)
CA 2 Cell. Corp.	2	Lassen, Modoc Plumas Counties (RSA #2)
CA RSA #3 L.P.	3	Alpine, Amador, Calaveras, Mariposa, Tuolumne Counties (RSA #3)

Company Name	Years of Service	Service Area
CA RSA #4 L.P.	3	Madera, Merced, & San Benito Counties (RSA #4)
CA RSA #9 Inc.	3	Mendocino & Lake Counties (RSA #9)
CA Rural Service Area #1, Inc.	3	Del Norte, Humboldt, Siskiyou, & Trinity Counties (RSA #1)
Cellular 2000	3	Madera, Merced, & San Benito Counties (RSA #4)
Cellular Pacific	3	El Dorado County (RSA #11)
Century El Centro	3	Imperial County (RSA #7)
Contel Cell. of CA, Inc. (RSA #6)	3	Mono, Inyo Counties (RSA #6)
Contel Cell. of CA Inc. (RSA #7)	3	Imperial County (RSA #7)
Contel Cell. of CA Inc. (RSA #9)	3	Mendocino, Lake Counties (RSA #9)
Data Cell. Systems	3	Sierra (RSA #10)
Fresno Cell. Tel. Co	. 6	Fresno (Fresno MSA), Tulare (Visalia MSA)

Company Name	Years of Service	Service Area
Fresno MSA L.P.	8	Fresno (Fresno MSA), Kern County (Bakersfield MSA), Visalia (Visalia MSA), Kings (RSA #12)
GTE Mobilnet of CA L.P.	9	SF, San Jose, Oakland (SF/San Jose/Oakland MSA), Salinas (Salinas MSA), Santa Cruz (Santa Cruz MSA), Santa Rosa (Santa Rosa MSA), Napa, Solano (Vallejo MSA),San Luis Obispo (RSA #5)
GTE Mobilnet of Santa Barbara	6	Santa Barbara County (Santa Barbara MSA)
Kings Tel. Co.	2	Kings County (RSA #12)
LA Cell. Tel. Co.	7	LA, Orange, Riverside, San Bernardino Counties (LA MSA)
LA SMSA L.P.	10	LA, Orange, Riverside, San Bernardino Counties (LA MSA)
Mammoth Cell. Inc.	3	Mono, Inyo Counties (RSA #6)
Modoc RSA L.P.	3	Lassen, Modoc, Plumas Counties (RSA #2)
Atlantic Cell. dba Mountain Cell.	3	El Dorado County (RSA #11) B-3

Company Name	Years of Service	Service Area
Napa Cell. Tel. Co.	6	Napa, Solano (Vallejo MSA)
Oxnard Cell. Tel. Co. (aka Ventura Cell. Tel. Co.)	_	Oxnard, Ventura (Oxnard MSA)
PacTel Cell. Corp. (Now AirTouch)	8	San Diego County (San Diego MSA)
Redding Cell. Partnership	5	Shasta County (Redding MSA), Colusa, Glenn, & Tehama Counties (RSA #8)
Sacramento Cell. Tel. Co.	6	Placer, Sacramento, Yolo Counties (Sacramento MSA), Sutter, Yuba (Yuba City MSA)
Sacramento Valley L.P	. 8	Stanislaus (Modesto MSA), San Joaquin (Stockton MSA), Placer, Sacramento, Yolo Counties (Sacramento MSA), Shasta County (Redding MSA) Sutter, Yuba (Yuba City MSA), Butte County (Chico MSA), Colusa, Glenn, Tehama (RSA #8) Sierra, Nevada (RSA #10) B-4

Company Name	Years of Service	Service Area
Salinas Cell. Tel. Co.	5	Monterey County (Salinas MSA)
Santa Barbara Cell. (Cellular One)	6	Santa Barbara County (Santa Barbara MSA)
Santa Cruz Tel. Co.	5	Santa Cruz County (Santa Cruz MSA)
SLO Cell., Inc.	1	San Luis Obispo (RSA #5)
Stockton Cell.	6	Stanislaus County (Modesto MSA), San Joaquin County (Stockton MSA)
US West Cell. of CA	8	San Diego County (San Diego MSA)

# Appendix C Interlocking Ownership in California Cellular Markets

## Appendix C

## Interlocking Ownership in California Cellular Markets

## PacTel and McCaw Are

### Partners In:

## Competitors In:

SF/San Jose/Oakland MSA Salinas MSA

Santa Rosa MSA Vallejo MSA Modesto MSA
Sacramento MSA
Stockton MSA
Redding MSA
Yuba City MSA

Colusa, Glenn, Tehama (RSA #8)

Fresno MSA Visalia MSA

Santa Barbara MSA Los Angeles MSA Oxnard MSA

### PacTel and Contel Are

## Partners In:

## Competitors In:

Modesto MSA
Sacramento MSA
Stockton MSA
Redding MSA

Yuba City MSA

Chico MSA

Colusa, Glenn, Tehama (RSA #8)

Sierra, Nevada (RSA #10)

Fresno MSA
Bakersfield MSA

Demoisired Mi

Visalia MSA

Kings County (RSA #12)

Los Angeles MSA

Oxnard MSA

Santa Barbara MSA

Del Norte, Humboldt, Siskiyou

& Trinity (RSA #1)

SF/San Jose/Oakland MSA Salinas MSA

Santa Rosa MSA Vallejo MSA

### Appendix C

## Interlocking Ownership in California Cellular Markets

## PacTel and Centennial Are

### Partners In:

Competitors In:

Modesto MSA
Sacramento MSA
Stockton MSA
Redding MSA
Yuba City MSA
Chico MSA
Colusa, Glenn, Tehama (RSA #8)
Sierra Nevada (RSA #10)
Del Norte, Humboldt, Siskiyou
& Trinity (RSA #1)

SF/San Jose/Oakland MSA Salinas MSA Santa Rosa MSA Vallejo MSA

## PacTel and US Cell. Are

#### Partners In:

Competitors In:

Fresno MSA
Bakersfield MSA
Visalia MSA
Kings County (RSA #12)
Los Angeles MSA
Oxnard MSA

Del Norte, Humboldt, Siskiyou, & Trinity (RSA #1)

## Contel and US Cell. Are

### Partners In:

Competitors In:

Fresno MSA
Bakersfield MSA
Visalia MSA
Kings County (RSA #12)
Los Angeles MSA
Oxnard MSA

Del Norte, Humboldt, Siskiyou, & Trinity (RSA #1)

# Appendix D Market Concentration Indices

## **Appendix** D

#### Herfindahl-Hirshman Index for Wireless Services Providers

#### **PCIA Forecasts**

	1998 Subscribers in Mill.	Percent	2003 Subscribers in Mill.	Percent
Cellular	33.07	69%	52.3	54%
New PCS	8.55	18%	31.11	32%
ESMR/SMR	5.19	11%	8.95	9%
Satellite	1.32	3%	4.11	4%
Total	48.13	100%	96.47	100%

#### CASE I: Maximum Frequency Aggregation

#### Assumptions:

(1) Each 10 MHz of frequency gamers equal market share.

(2)

Incumbent cellular carriers will each manage to acquire 10 Mhz of frequency.

There are three viable PCS service providers per FCC's Modifications to PCS Band Plan. (3) See June 9, 1994 News Report - FCC

Assumed (	market share for 10 MHz	: 1%		3%	
	Add'ni	Percent HHI		Percent	HHI
	Freq.				
Cellular 1	10	36%	1284	30%	888
Cellular 2	10	36%	1284	30%	888
PCS - A	40	6%	35	11%	116
PCS - B	30	4%	20	8%	65
PCS - C	30	4%	20	8%	65
ESMR		11%	116	9%	86
Satellite		3%	8	4%	18
Total	120	100%	2767	100%	2125

### Appendix D

#### Herfindahl-Hirshman Index for Wireless Services Providers

#### **PCIA Forecasts**

	1998	_	2003	
	Subscribers in Mill.	Percent	Subscribers in Mill.	Percent
Cellular	33.07	69%	52.3	54%
New PCS	8.55	18%	31.11	32%
ESMR/SMR	5.19	11%	8.95	9%
Satellite	1.32	3%	4.11	4%
Total	48.13	100%	0 96.47	100%

#### CASE II: Minimum Frequency Aggregation

#### Assumptions:

- Each 10 MHz of frequency garners equal market share.
- (1) (2) Incumbent cellular carriers do not acquire any additional spectrum.
- There are six viable PCS service providers per FCC's Modifications to PCS Band Plan. (3) See June 9, 1994 News Report - FCC
- (4) There are three viable ESMR/SMRs.

Assumed m	narket share for 1	0 MHz 1%		3%	
/	Add'ni	Percent	HHI	Percent	HHI
F	Freq.				
Cellular 1		34%	1180	27%	735
Cellular 2		34%	1180	27%	735
PCS - A	30	4%	20	8%	65
PCS - B	30	4%	20	8%	65
PCS - C	30	4%	20	8%	65
PCS - D	10	1%	2	3%	7
PCS - E	10	1%	2	3%	7
PCS - F	10	1%	2	3%	7
ESMR 1		4%	13	3%	10
ESMR 2		4%	13	3%	10
ESMR 3		4%	13	3%	10
Satellite		3%	8	4%	18
Total	120	100%	2473	100%	1733

# Appendix E Market Share Data

## Appendix E

## Average Reseller Market Share

Year	LA	Bay Area	Average	Sacramento	San Diego	Average	Santa Barbara
1989							
1990							
1991							
1992							
1993							

#### Appendix E

# Market Shares Within Los Angeles MSA

LASMSA

Including Wholesale Customers

Retail:

LACTC

Resellers:

LACTC

LASMSA

1993

# Market Shares Within S.F. Bay Area MSA

Including Wholesale Customers

BACTC GTE Mobilnet LP

Retail:

Resellers:

BACTC GTE Mobilnet LP

1989 1990

1991

1992

1993

# Market Shares Within San Diego MSA

AirTouch

including Wholesale Customers

Retail:

**US West** 

Resellers:

**US West** 

**AirTouch** 

1989

1990

1991

1992

#### Appendix E

## Market Shares Within Sacramento MSA

**SVLP** 

Including Wholesale Customers

Retail:

SCTC

Resellers:

SCTC

**FCTC** 

**SVLP** 

1993

Market Shares Within Fresno MSA

FCTC FMSA LP

Including Wholesale Customers

Retail:

Resellers:

FMSA LP

Market Shares Within Santa Barbara MSA

GTE LP

Including Wholesale Customers

Retail:

SBCS

Resellers:

SBCS

GTE LP

1989 1990 1991

1992

#### Appendix E

# Market Shares Within RSA 2

Including Wholesale Customers

Retail: Cal. RSA #2 Modoc RSA LP

Resellers:

Cal. RSA #2 Modoc RSA LP

1993

## Market Shares Within RSA 7

Including Wholesale Customers

Retail: Century EC Contel Cell. Resellers:

Century EC

Contel Cell.

19**8**9 1990

1991

1351

1992

# Appendix F After-Tax Rates of Return

Appendix F

After-Tax Rates of Return \*

Major Markets	1989	1990	1991	1992	1993
Los Angeles Cellular Tel. Co.	71.4%	58.5%	52.4%	51.6%	47.0%
Los Angeles SMSA LP	49.4%	43.4%	34.8%	28.0%	33.8%
Bay Area Cellular Tel. Co.	43.7%	48.1%	43.5%	31.1%	49.5%
GTE Mobilnet CA LP	22.8%	15.8%	16.4%	20.0%	18.1%
US WEST Cellular of Cal. **	5.2%	9.0%	-4.3%	-7.4%	2.9%
AirTouch - San Diego	33.0%	32.9%	23.9%	21.4%	30.4%
Average Return	37.6%	34.6%	27.8%	24.1%	30.3%
Medium-size markets					
Sacramento Cellular Tel. Co.	-2.9%	21.4%	22.1%	22.2%	17.4%
Sacramento Valley LP	17.6%	10.1%	2.8%	0.8%	6.4%
Fresno Cellular Tel. Co.	-19.6%	11.9%	24.0%	31.3%	25.7%
Fresno MSA Ltd. Partnership	missing	8.0%	7.6%	11.2%	10.7%
Santa Barbara Cell. Sys., Ltd.	-39.4%	10.4%	<b>-9.7%</b>	5.0%	10.5%
GTE Mobilnet Santa Barb. LP	2.6%	2.0%	8.5%	6.7%	7.5%
Average Return	-8.4%	7.2%	9.2%	12.8%	13.0%
Rural Markets					
Cal. RSA #2, Inc.	missing	missing	<b>-49.0%</b>	55.0%	missing
Modoc RSA LP	missing	15.0%	-24.4%	-19.2%	-6.2%
Century El Centro Cellular	NA	NA	NA	NA	NA
Contel Cellular Inc. (RSA 7)	missing	-32.2%	-19.5%	6.0%	35.4%
Average Return	NA	-23.6%	-31.0%	-22.8%	14.6%

<sup>\*</sup> Ratemaking rates of return in California are generally based on a ratebase that excludes plant held for future use and construction work in progress, and would therefore result in higher reported ratemaking rates of return than those shown above.

<sup>\*\*</sup> U.S. West's losses in 1991 and 1992 can be attributed to extraordinarily high administrative and general expenses. In these two years, the company reported \$15.3 and \$15.4 million, respectively, in A&G expenses, an unexplained threefold increase from its \$5.1 million in A&G expenses in 1989.

# Appendix G Trends in Cellular Subscriber Units and Revenues

## Appendix G

#### Trends in Cellular Subscriber Units and Revenues

	1989	1990	1991	1992	1993	
Los Angeles Cellular T	el. Co.					
Total Subscriber Units						
Subscriber Growth Rate	£190 670 760	<b>2072 700 000</b>	<b>6</b> 040 470 954	£407.010.447	£440 096 017	
Sales Revenue Revenue Growth Rate	\$182,673,760	\$273,798,202 50%	\$342,479,354 25%	\$407,312,447 19%	\$448,836,017 10%	
Rate of Return	71.4%	58.5%	52.4%	51.6%	47.0%	
nais or netoni	71.779	30.3 %	JE. 4 /8	31.0%	47.0%	
Los Angeles SMSA LP						
Total Subscriber Units						
Subscriber Growth Rate						
Sales Revenue	<b>\$</b> 202, <b>98</b> 9,824	<b>\$26</b> 0,636,104	\$298,828,247	\$347,817,121	\$433,820,079	
Revenue Growth Rate		28%	15%	16%	25%	
Rate of Return	49.4%	43.4%	34.8%	28.0%	33.8%	
Bay Area Cellular Tel.	Co.					
Total Subscriber Units						
Subscriber Growth Rate						
Sales Revenue	\$72,342,000	\$98,907,000	\$122,831,000	\$152,582,000	\$188,627,000	
Revenue Growth Rate		37%	24%	24%	24%	
Rate of Return	43.7%	48.1%	43.5%	31.1%	49.5%	
GTE Mobilnet of Calif. LP						
Total Subscriber Units Subscriber Growth Rate						
Sales Revenue	<b>\$</b> 63,032,7 <b>8</b> 8	\$100,291,776	\$121,589,250	\$130,969,324	<b>\$</b> 150, <b>838</b> ,376	
Revenue Growth Rate		59%	21%	8%	15%	
Rate of Return	22.8%	15.8%	16.4%	20.0%	18.1%	